

AMENDMENTS TO THE CLAIMS

1-26. (Cancelled)

27. (Currently amended) The phosphor blend of claim ~~[[26]]~~ 34, wherein the efficacy is above 340 lm/W.

28. (Currently amended) A white light emitting phosphor blend comprising at least three phosphors, wherein the white light emitted by the phosphor blend in response to incident radiation having a peak wavelength between 360 and 420 nm comprises a color temperature between 3000K and 6500K, a CRI above 70 and an efficacy above 200 lm/W;

wherein the efficacy is above 264 lm/W and the color temperature is between 3300K and 4100K for incident radiation having a peak wavelength between 370 and 405 nm; and

~~The of claim 27,~~ wherein the phosphor blend comprises:

about 55 to about 75 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7$ :  $\text{Eu}^{2+}$ ,  $\text{Mn}^{2+}$  phosphor;

about 11 to about 22 weight percent of at least one of  $(\text{Ba}, \text{Sr}, \text{Ca})_2\text{SiO}_4$ : $\text{Eu}^{2+}$

phosphor; and

about 13 to about 22 weight percent of at least one of

$(\text{Sr}, \text{Ba}, \text{Ca}, \text{Mg})_5(\text{PO}_4)_3\text{Cl}$ : $\text{Eu}^{2+}$  phosphor.

29. (Currently amended) The phosphor blend of claim 28, wherein the phosphor blend comprises:

about 57.5 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7$ :  $\text{Eu}^{2+}$ ,  $\text{Mn}^{2+}$  phosphor;

about 21.5 weight percent  $(\text{Ba}_{0.65}, \text{Sr}_{0.2}, \text{Ca}_{0.1}\text{Eu}_{0.05})_2\text{SiO}_4$  phosphor; and

about 21 weight percent of the at least one of  $(\text{Sr}, \text{Ba}, \text{Ca})_5(\text{PO}_4)_3\text{Cl}$ : $\text{Eu}^{2+}$  phosphor.

30. (Currently amended) The phosphor blend of claim 28, wherein the phosphor blend comprises:

about 61.4 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7$ :  $\text{Eu}^{2+}$ ,  $\text{Mn}^{2+}$  phosphor;

about 19.4 weight percent  $(\text{Ba}_{0.65}, \text{Sr}_{0.2}, \text{Ca}_{0.1}\text{Eu}_{0.05})_2\text{SiO}_4$  phosphor; and

about 19.2 weight percent of the at least one of  $(\text{Sr}, \text{Ba}, \text{Ca})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$  phosphor.

31. (Currently amended) The phosphor blend of claim 28, wherein the phosphor blend comprises:

about 73.7 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7:\text{Eu}^{2+}, \text{Mn}^{2+}$  phosphor;

about 12.1 weight percent  $(\text{Ba}_{0.65}, \text{Sr}_{0.2}, \text{Ca}_{0.1}\text{Eu}_{0.05})_2\text{SiO}_4$  phosphor; and

about 14.2 weight percent of the at least one of  $(\text{Sr}, \text{Ba}, \text{Ca})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$

phosphor.

32. (Currently amended) The phosphor blend of claim ~~[[26]]~~ 28, wherein the CRI is above 90.

33. (Currently amended) The phosphor blend of claim ~~[[32]]~~ 34, further comprising a fourth phosphor comprising  $3.5\text{MgO} \cdot 0.5\text{MgF}_2 \cdot \text{GeO}_2:\text{Mn}^{4+}$ .

34. (Currently amended) A white light emitting phosphor blend comprising at least three phosphors, wherein the white light emitted by the phosphor blend in response to incident radiation having a peak wavelength between 360 and 420 nm comprises a color temperature between 3000K and 6500K, a CRI above 70 and an efficacy above 200 lm/W;

wherein the efficacy is above 264 lm/W and the color temperature is between 3300K and 4100K for incident radiation having a peak wavelength between 370 and 405 nm;

wherein the CRI is above 90; and

~~The phosphor blend of claim 32,~~ wherein the phosphor blend comprises:

about 11 to about 43 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7:\text{Eu}^{2+}, \text{Mn}^{2+}$  phosphor;

about 9 to about 15 weight percent  $(\text{Ba}, \text{Sr}, \text{Ca})_2\text{SiO}_4:\text{Eu}^{2+}$  phosphor;

about 6 to about 14 weight percent of at least one

of  $(\text{Sr}, \text{Ba}, \text{Ca}, \text{Mg})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$  phosphor; and

about 30 to about 71 weight percent  $3.5\text{MgO} \cdot 0.5\text{MgF}_2 \cdot \text{GeO}_2:\text{Mn}^{4+}$  phosphor.

35. (Currently amended) The phosphor blend of claim 34, wherein the phosphor blend comprises:

about 12.7 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7$ :  $\text{Eu}^{2+}$ ,  $\text{Mn}^{2+}$  phosphor;  
about 10 weight percent  $(\text{Ba}_{0.65}, \text{Sr}_{0.2}, \text{Ca}_{0.1}\text{Eu}_{0.05})_2\text{SiO}_4$  phosphor;  
about 7.4 weight percent of the at least one of  $(\text{Sr}, \text{Ba}, \text{Ca}, \text{Mg})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$  phosphor; and  
about 69.9 weight percent  $3.5\text{MgO} \cdot 0.5\text{MgF}_2 \cdot \text{GeO}_2:\text{Mn}^{4+}$  phosphor.

36. (Currently amended) The phosphor blend of claim 34, wherein the phosphor blend comprises:

about 17.6 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7$ :  $\text{Eu}^{2+}$ ,  $\text{Mn}^{2+}$  phosphor;  
about 11.8 weight percent  $(\text{Ba}_{0.65}, \text{Sr}_{0.2}, \text{Ca}_{0.1}\text{Eu}_{0.05})_2\text{SiO}_4$  phosphor;  
about 9 weight percent of the at least one of  $(\text{Sr}, \text{Ba}, \text{Ca})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$  phosphor;  
and  
about 61.6 weight percent  $3.5\text{MgO} \cdot 0.5\text{MgF}_2 \cdot \text{GeO}_2:\text{Mn}^{4+}$  phosphor.

37. (Currently amended) The phosphor blend of claim 34, wherein the phosphor blend comprises:

about 41.5 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7$ :  $\text{Eu}^{2+}$ ,  $\text{Mn}^{2+}$  phosphor;  
about 14.2 weight percent  $(\text{Ba}_{0.65}, \text{Sr}_{0.2}, \text{Ca}_{0.1}\text{Eu}_{0.05})_2\text{SiO}_4$  phosphor;  
about 12.8 weight percent of the at least one of  $(\text{Sr}, \text{Ba}, \text{Ca})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$  phosphor; and  
about 31.5 weight percent  $3.5\text{MgO} \cdot 0.5\text{MgF}_2 \cdot \text{GeO}_2:\text{Mn}^{4+}$  phosphor.

38-45. (Cancelled)

46. (New) A white light emitting phosphor blend comprising at least three phosphors, wherein the white light emitted by the phosphor blend in response to incident radiation having a peak wavelength between 360 and 420 nm comprises a color temperature between 3000K and 6500K, a CRI above 70 and an efficacy above 200 lm/W; and wherein the phosphor blend comprises:

about 55 to about 75 weight percent  $\text{Sr}_2\text{P}_2\text{O}_7$ :  $\text{Eu}^{2+}$ ,  $\text{Mn}^{2+}$  phosphor;

about 11 to about 22 weight percent of at least one of  $(\text{Ba}, \text{Sr}, \text{Ca})_2\text{SiO}_4:\text{Eu}^{2+}$  phosphor; and

about 13 to about 22 weight percent of at least one of  $(\text{Sr}, \text{Ba}, \text{Ca}, \text{Mg})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$  phosphor.